Projecting 2011 National Emissions Inventory to Future Years

EPA is in the process of developing a 2011 air quality modeling platform. This modeling platform is likely to be used for analyses of interstate transport, as well as for the Ozone NAAQS review Regulatory Impact Assessment, NATA, sharing with states for SIP development, and other purposes. The 2011 National Emissions Inventory (NEI) will be the basis for our modeling platform. This and other handouts related to the platform can be found at the Emissions Modeling Clearinghouse at http://www.epa.gov/ttn/chief/emch/index.html, under the "2011-based Modeling Platform" section

EPA is currently working on projecting the 2011 NEI inventory to future years, such as 2018, 2020, 2025, 2030, and later to support various modeling studies. Methods differ for projecting stationary versus mobile sources, with onroad and nonroad mobile sources being projected using MOVES and NMIM, respectively. For stationary sources, different methods are used for electric generating utility (EGU) sources and non-EGU sources. EPA projects EGU sources to future years using the Integrated Planning Model (IPM), while non-EGU point sources are projected using information on plant closures, consent decrees, and federal and state rules. Stationary nonpoint sources are typically projected using growth factors and information on federal and state rules. Note that EPA has assumed a no-growth methodology for many non-EGU sources and this methodology dates back to 2005. If alternative realistic projection methods are available, we would like to include them in our process.

For information on projections of EGU sources, please see the accompanying document and spreadsheet related to the NEEDS database and follow those instructions to provide comments. The NEEDS database is a primary input file to IPM and includes information on control devices, shutdowns, and new units.

For nonEGU sources, EPA would like to obtain a list of point and nonpoint controls, projection factors, and planned or known stack/unit/facility closures that take effect after 2011. Ideally, these measures would include data with some of the key fields provided in the accompanying "point" and "nonpoint" spreadsheets that allow easy mapping to the NEI. When providing this data, the highest priority should be given to the largest emitters that might contribute to ozone or PM2.5 formation. EPA will review and strive to include projection data that is reasonably well-formatted and referenced, particularly those from approved SIPs. References and/or metadata on projections/controls/closures information is highly encouraged for transparency and reproducibility.

List of key questions for states/regions to consider

1) What information do you have on changes to larger-emitting sectors? Examples of useful information include planned controls/measures approved in SIPS and implementation dates.
2) Are you aware of any fuel switching plans for industrial sources (point and nonpoint)? Fuel switching can have significant impacts on projected non-attainment. Note that known or planned unit/sector fuel switching, whether at state or unit-level, can have significant local impacts.

3) Are you aware of enforceable consent decrees/settlement information not already included in the 2011 NEI? Any insight or matching of this closures/control information to specific NEI sources is appreciated.

4) Is there any other information about upcoming emissions changes to any source category that EPA should be aware of?

To provide emissions projections information, please follow the instructions in the accompanying spreadsheet. Please provide as much detail as possible with respect to fields that allow the projections to be mapped onto the NEI. These include facility and unit IDs, state/county FIPS (or tribal) codes, Source Classification Codes (SCCs), pollutant codes, percent reductions and/or increases, and compliance dates. For information on EIS IDs for facilities and units, see the accompanying point source reference workbook "2011_point_source_id_References_050313.xlsx" for ID cross references for sources with emissions of some pollutant greater than 50 tons per year. Note that this reference includes both EGUs and nonEGUs, and that there are multiple rows for some sources due to states providing CAPs and EPA providing HAP emissions.. If detailed matching information is not available, more general information about on-the-books rules and other upcoming emission changes would also be useful provided that there are references (e.g., web links) available to help quantify the impacts of the changes.

For reference, EPA's most current projection methodology for the 2007 emissions platform is summarized in Table 4-1 of the 2007v5 emissions modeling platform, available at: http://epa.gov/ttn/chief/emch/2007v5/2007v5_2020base_EmisMod_TSD_13dec2012.pdf and in Appendices E & F: http://epa.gov/ttn/chief/emch/2007v5/2007v5_TSD_Appendices_14dec12.pdf As seen in this documentation, EPA utilized a limited collection of known settlements and consent decrees, along with projection (growth) factors for various non-EGU source categories such as Residential Wood Combustion, ultra low sulfur diesel fuel state rules, agricultural NH3 animal population growth, and the RICE NESHAP and Boiler MACT (12/2012) reconsiderations.

Please provide non-EGU projections information by emailing an updated version of the nonEGU projections workbook to Rich Mason (mason.rich@epa.gov) with the subject "NonEGU Projections Data". Data received by **May 31, 2013** will be evaluated for input to future year modeling that will occur during the summer of 2013. If additional data becomes available after that date, we would still appreciate you forwarding that along, but the timing of its receipt will impact the date at which it can be folded into the EPA modeling platform.

Thank you for your participation in this effort.